AMENDMENTS TO THE CLAIMS

1. (Currently amended) A flying head type optical head apparatus, comprising:

a fixed arm;

a suspension, an end of which is fixed to said fixed arm and the other end is a free end;

a slider attached to the free end of said suspension;

an object lens mounted on said slider;

an optical means fixed to said fixed arm and having a light source and a light receiving system with the fixed arm disposed between said object lens and said optical means;

a collimator lens positioned between said ~~light source~~ fixed arm and said object lens along an optical axis connecting said light source and said object lens via said collimator lens, for converging a light from said light source to make it enter said object lens, converging a returned-back light from said object lens to make it enter said light source; and

a first collimator lens moving means for moving said collimator lens along said optical axis between said ~~light source~~ fixed arm and said object lens;

wherein the slider mounted with said object lens, attached to the free end of said suspension floats due to a wind pressure of a rotary body rotating at a position facing to said object lens.

2. (Previously Presented) An optical head apparatus as set forth in claim 1, wherein said collimator lens is positioned so that a focal position thereof positions approximately at a light emission point of said light source, and an incident iris of said object lens positions at a focal position when assuming that a parallel light enters from the light source to said collimator lens.

3. (Previously Presented) An optical head apparatus as set forth in claim 2, wherein a distance between said collimator lens and the light emission point of said light source is approximately equal to a distance between said collimator lens and the incident iris of said object lens.

4. (Previously Presented) An optical head apparatus as set forth in claim 1, wherein said first collimator lens moving means is an electromagnet.

5. (Previously Presented) An optical head apparatus as set forth in claim 1, wherein said first collimator lens moving means is a Piezo-effect element.

6. (Original) An optical head apparatus as set forth in claim 1, wherein said rotary body is a rotary optical recording medium.

7. (Previously Presented) An optical head apparatus as set forth in claim 1, further comprises a second collimator lens moving means for substantially moving said collimator lens in the direction perpendicular to said optical axis.

8. (Previously Presented) An optical head apparatus as set forth in claim 7, wherein said second collimator lens moving means is an electromagnet.

9. (Previously Presented) An optical head apparatus as set forth in claim 7, wherein said second collimator lens moving means is a Piezo-effect element.

10. (Original) An optical head apparatus as set forth in claim 7, wherein said rotary body is a rotary magneto-optical recording medium.

11. (Previously Presented) An optical head apparatus as set forth in claim 1, wherein

said optical means fixed to said fixed arm emits a light from said light source along a surface of said arm; and

said fixed arm is provided with a mirror for directing the light emitted from said optical means to said collimator lens.

12. (Previously Presented) An optical head apparatus as set forth in claim 11, wherein

said optical means fixed to said fixed arm emits a light from said light source along a surface of said fixed arm; and

said fixed arm has a mirror for directing the light emitted from said optical means to said collimator lens and a mirror rotation means for rotating the mirror for making the light emitted from said optical means enter said collimator lens by being shifted from said optical axis.

13. (Original) An optical head apparatus as set forth in claim 12, wherein said mirror rotation means is an electromagnet.

14. (Original) An optical head apparatus as set forth in claim 12, wherein said mirror rotation means is a Piezo-effect element.

15. (Original) An optical head apparatus as set forth in claim 1, wherein said object lens is configured by combining two converging lenses provided close to the slider and used for a near field recording operation.

16. (Currently amended) An optical recording/reproducing apparatus, comprising:

a rotary driving means for a rotary recording medium for optically or magneto-optically recording and/or recording/reading data;

a flying head type optical head apparatus comprising a fixed arm; a suspension, an end of which is fixed to said fixed arm and the other end is a free end; a slider attached to the free end of said suspension; an object lens mounted on said slider; an optical means fixed to said fixed arm and having a light source and a light receiving system with the fixed arm disposed between said object lens and said optical means; a collimator lens positioned between said ~~light source~~ fixed arm and said object lens along an optical axis connecting said light source and said object lens via said collimator lens, for converging a light from said light source to make it enter said object lens; and a first collimator lens moving means for moving said collimator lens along said optical axis between said fixed arm ~~light source~~ and said object lens; wherein the slider mounted with said object lens, attached to the free end of said suspension floats due to a wind

pressure caused by rotation of said rotary recording medium rotating at a position facing to said object lens; and

a control apparatus for performing tracking control on said optical head apparatus, comprising a collimator lens position control means for controlling a position of said collimator lens by driving said first collimator lens moving means based on a focus error signal.

17. (Previously Presented) An optical recording/reproducing apparatus as set forth in claim 16, wherein said collimator lens is positioned so that a focal position thereof positions approximately at a light emission point of said light source, and an incident iris of said object lens positions at a focal position when assuming that a parallel light enters from the light source to said collimator lens.

18. (Previously Presented) An optical recording/reproducing apparatus as set forth in claim 17, wherein a distance between said collimator lens and the light emission point of said light source is approximately equal to a distance between said collimator lens and the incident iris of said object lens.

19. (Previously Presented) An optical recording/reproducing apparatus as set forth in claim 16, wherein

said optical head apparatus further comprises a second collimator lens moving means for substantially moving said collimator lens in the direction perpendicular to said optical axis; and

said control apparatus further comprises a tracking sub servo control means for controlling a position of said collimator lens to the track direction of said rotary recording medium by driving said second collimator lens moving means based on a tracking error signal.

20. (Previously Presented) An optical recording/reproducing apparatus as set forth in claim 16, wherein

said rotary recording medium has one or a plurality of recording surfaces; and

said collimator lens position control means of said control means drives said first collimator lens moving means to adjust a position of said collimator lens so that a light from said light source is focused on one recording surface subjected to recording or reproducing of data through said object lens among one or a plurality of recording surfaces of said rotary recording medium.

21. (Currently Amended) An optical head apparatus as set forth in claim 1, wherein the first collimator lens moving means moves the collimator lens independently to the light source.

22. (Currently Amended) An optical head apparatus as set forth in claim 16, wherein the first collimator lens moving means moves the collimator lens independently to the light source.